## INTERNATIONAL SEARCH REPORT

International application No. PCT/CN03/01001

A. CLASSIFICATION OF SUBJECT MATTER			
IPC' EC	NATH 1 5/44		
According to International Patent Classification (IPC) or to both na			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed	by classification symbols)		
IPC' E04H15/44 15	/40 15/46 15/34 15/32		
Documentation searched other than minimum documentation to the	extent that such documents are included	in the fields searched	
Chinese Pate	ent Document		
Electronic data base consulted during the international search (name	e of data base and, where practicable, sear	ch terms used)	
EPODOC, WP	I, PAJ, CNPAT	•	
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*  Y  US, B, 6557572(Jeh-kun Lah), 6, May. 2003(06)		Relevant to claim No.  1, 2, 7  3-6	
Y JP, A, 11-141193(IWATA, Kohei et al), 25. May document	y. 1999(25.05.1999), the whole	1, 2, 7 3-6	
☐ Further documents are listed in the continuation of Box C. ∑			
* Special categories of cited documents:  "A" document defining the general state of the art which is not considered to be of particular relevance  "E" earlier application or patent but published on or after the international filing date  "L" document which may throw doubts on priority claim (S) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means  "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the or priority date and not in conflict cited to understand the principle of invention  "X" document of particular relevance cannot be considered novel or cannot an inventive step when the document of particular relevance cannot be considered to involve a document is combined with one of documents, such combination being skilled in the art  "&" document member of the same p	the application but theory underlying the the claimed invention to considered to involve the claimed invention inventive step when the more other such obvious to a person	
Date of the actual completion of the international search  13. Jul. 2004(13.07.2004)	Date of mailing of the international sear 0 2 · AUG 2004 (0 2 · 0	ch report ) 8 • 2 0 0 4)	
Name and mailing address of the ISA/CN 6 Xitucheng Rd., Jirrnen Bridge, Haidian District, 100088 Beijing, China Facsimile No. 86-10-62019451 Form PCT/ISA/210 (second sheet) (July 1998)	Authorized officer  WANG BO  Telephone No. 86-10-620850 IR		

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/CN03/01001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6557572 B	06-05-2003	DE20022133U	03-05-2001
		GB2357785A	04-07-2001
		GB2357785B	29-05-2002
JP 11-141193 A	25-05-1999	none	·

Form PCT/ISA /210 (patent family annex) (July 1998)

国际申请号

PCT/CN03/01001

A. 主题的分类

IPC E04H15/44

按照国际专利分类表(IPC)或者同时按照国家分类和 IPC 两种分类

B. 检索领域

检索的最低限度文献(标明分类体系和分类号)

IPC E04H15/44 15/40 15/46 15/34 15/32

包含在检索领域中的除最低限度文献以外的检索文献

中国专利文献

在国际检索时查阅的电子数据库(数据库的名称和,如果实际可行的,使用的检索词)

EPODOC, WPI, PAJ, CNPAT

## C. 相关文件

—— 类	型*	引用文件,必要时,指明相关段落	相关的权利要求编号
Y	. 1		1, 2, 7
		US, B, 6557572(Jeh-kun Lah), 2003 年 5 月 6 日(06.05.03),全文	
Α			3-6
Y			1, 2, 7
		JP, A, 11-141193(甲府方 等), 1999年5月25日(25.05.1999), 全文	
Α			3-6
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		·	
			1

## □ 其余文件在 C 栏的续页中列出。

☑ 见同族专利附件。

- \* 引用文件的专用类型:
- "A" 明确叙述了被认为不是特别相关的一般现有技术的文件
- "E"在国际申请日的当天或之后公布的在先的申请或专利
- "L"可能引起对优先权要求的怀疑的文件,为确定另一篇 引用文件的公布日而引用的或者因其他特殊理由而引 用的文件
- "O" 涉及口头公开、使用、展览或其他方式公开的文件
- "P"公布日先于国际申请日但迟于所要求的优先权日的文件
- "T" 在申请日或优先权日之后公布的在后文件,它与申请不相 抵触,但是引用它是为了理解构成发明基础的理论或原理
- "X" 特别相关的文件,仅仅考虑该文件,权利要求所记载的 发明就不能认为是新颖的或不能认为是有创造性
- "Y" 特别相关的文件,当该文件与另一篇或者多篇该类文件 结合并且这种结合对于本领域技术人员为显而易见时, 权利要求记载的发明不具有创造性
- "&" 同族专利成员的文件

国际检索实际完成的日期

13. 7月 2004(13.07.2004)

国际检索报告邮寄日期

02 - 8月 2004 (02 - 08 - 2004)

国际检索单位名称和邮寄地址

ISA/CN

中国北京市海淀区西土城路 6 号(100088)

传真号: 86-10-62019451

受权官员

印譯

电话号码: 86-10-62085013

PCT/ISA/210 表(第 2 页)(1998 年 7 月)

į	国际检索报告 关于同族专利成员的情报	国际申	号 PCT/CN03/01001
检索报告中引用的 专利文件	公布日期	同族专利成员	公布日期
US 6557572 B	06-05-2003	DE20022133U	03-05-2001
		GB2357785A	04-07-2001
		GB2357785B	29-05-2002
•			
JP 11-141193 A	25-05-1999	无同族专利	
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